**Supplemental Material S1.** The full models with intercepts, coefficients, and error terms for accuracy and reaction time analyses.

*Accuracy ij*= *β0*+ *(β1 × task)* + *(β2 × condition)* + *(β3 × task \* condition)* + *b0i* + *b1j* + *εij (1)*

*Reaction time ij*= *β0*+ *(β1 × task)* + *(β2 × condition)* + *(β3 × task \* condition)* + *b0i* + *b1j* + *εij (2)*

In these models, *β0* represented the intercept, which was the predicted outcome when all other predictors were equal to 0. *β1*, *β2*, and *β3* represented the coefficients for the two fixed factors and their interaction respectively. These coefficients reflected how much the outcome variable changed relative to a unit of change in the corresponding predictors. The random intercepts were represented as *b0i* and *b1j*, where *i* varied according to decoder participants and *j* varied according to test items. An error term (*ε*) was also included to account for the distance between the predicted value and the actual data point (i.e., residual).